

Maintenance of pdgLive

Overview

I. Update additional tables (can be continuously updated)

- 1) Tables with HTML content
- 2) Table with reference to RPP
- 3) Tables with additional links
- 4) HTML macro definitions
- 5) Tables with parsing exceptions

II. Update the Macro→HTML Parser

III. Update site configuration (database connection etc.)

Tables with HTML content

The screenshot shows the PDG website with several numbered callouts:

- 1**: The top navigation bar with the PDG logo.
- 2**: A red banner at the top right stating "UNDER CONSTRUCTION DATA FOUND HERE SHOULD NOT BE QUOTED".
- 3**: A link to "GAUGE & HIGGS BOSONS".
- 4**: A bracket grouping links to "LEPTONS" and "QUARKS".
- 5**: A link to "MESONS".
- 6**: A link to "BARYONS".
- 2**: A link to the footer information.

GAUGE & HIGGS BOSONS

- ▼ Reviews on Gauge & Higgs Bosons
- ▼ ν
- ▼ gluon
- ▼ graviton
- ▼ W
- ▼ Z
- ▼ Higgs Bosons
- ▼ Heavy Bosons
- ▼ Axions

LEPTONS

- ▼ Reviews on Leptons
- ▼ e, μ, τ
- ▼ Heavy Charged Lepton
- ▼ $e^+ \nu_e \mu^+ \nu_\mu \tau^+ \nu_\tau$
- ▼ Number of Neutrino Types
- ▼ Double β -Decay
- ▼ Neutrino Mixing
- ▼ Heavy Neutral Leptons

QUARKS

- ▼ Reviews on Quarks
- ▼ Light quarks (u, d, s)
- ▼ c
- ▼ b
- ▼ t
- ▼ b'
- ▼ Free quark

MESONS

- ▼ Reviews on Mesons
- ▼ Light Unflavoured
- ▼ Further States
- ▼ Strange
- ▼ Charmed
- ▼ Charmed, Strange
- ▼ Bottom
- ▼ Bottom, Strange
- ▼ Bottom, Charmed
- ▼ cc
- ▼ bb
- ▼ Non $q\bar{q}$ Candidates

BARYONS

- ▼ Reviews on Baryons
- ▼ N Baryons
- ▼ Δ Baryons
- ▼ Exotic Baryons
- ▼ Λ Baryons
- ▼ Ξ Baryons
- ▼ Σ Baryons
- ▼ Ω Baryons
- ▼ Charmed Baryons
- ▼ Doubly-Charmed
- ▼ Bottom Baryons

OTHER SEARCHES

- ▼ Reviews on Other Searches
- ▼ Magnetic Monopole
- ▼ Supersymmetric Particles
- ▼ Technicolor
- ▼ Quark and Lepton Compositeness
- ▼ Extra Dimensions
- ▼ WIMPs

CONSERVATION LAWS

- ▼ Reviews on Conservation Laws
- ▼ Discrete Space-Time Symm.
- ▼ Number Conservation Laws

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- CURRENT – holds citation (1), additional site info (2)
- FIRSTPAGE – holds block titles and coordinates (3)
- FPAGE – holds the content of blocks (4)
- CONLAW_TEXT – titles for conservation laws (5)
- REVIEWS – review links (6)

Table with reference to RPP

- CURRENT

code	date	text
CURRENT	2006	Last Edition Year
LOCAL	2006	LBL
COPYRIGHT	2006	A. Rosenfeld et al.
ChYe	2006	2004
ChMo	2006	06
FUNDED	2006	Funded by
MARKER	2006	UNDER CONSTRUCTION...
LBL	2006	//pdg.lbl.gov/2006/reviews/

Tables with additional links

- SUMMARY_LINKS

Sometimes two or more **links** in the summary may lead all to the same data block:

Supersymmetric Particle Searches

Due to the length of this section, not all information is displayed. To expand a currently hidden section, click on the ▼ icon. To hide an expanded section, click on the ▲ icon. To view a fully expanded version of this section, please [click here](#).

Limits are based on the Minimal Supersymmetric Standard Model.

Assumptions include: 1) $\tilde{\chi}_1^0$ (or $\tilde{\nu}$) is lightest supersymmetric particle; 2) R -parity is conserved; 3) With the exception of \tilde{t} and \tilde{b} , all scalar quarks are assumed to be degenerate in mass and $m_{\tilde{q}_R} = m_{\tilde{q}_L}$. 4) Limits for sleptons refer to the $\tilde{\tau}_R$ states.

See the Particle Listings for a Note giving details of supersymmetry.

$\tilde{\chi}_1^0$ — neutralinos (mixtures of $\tilde{\nu}$, \tilde{Z}^0 , and \tilde{H}_1^0)

Mass $m_{\tilde{\chi}_1^0}$ >46 GeV , CL=95% (RPP 2004 summary data) [all $\tan \beta$, all Δm_0 , all m_0]

Mass $m_{\tilde{\chi}_2^0}$ >62.4 GeV , CL=95% (RPP 2004 summary data)

[$1 < \tan \beta < 40$, all m_0 , all $m_{\tilde{\chi}_2^0} - m_{\tilde{\chi}_1^0}$]

Mass $m_{\tilde{\chi}_3^0}$ >99.9 GeV , CL=95% (RPP 2004 summary data)

[$1 < \tan \beta < 40$, all m_0 , all $m_{\tilde{\chi}_3^0} - m_{\tilde{\chi}_1^0}$]

Tables with additional links (cont.)

- LINKS_FOOTNOTE }
 - LINKS_PREP }
 - REFINFO
- links from datablock texts (headers, footnotes) to other datablocks, or to reviews
- links to SLAC SPIRES

$m_{\Sigma_c^0} - m_{\Lambda_c^+}$	Section References				
VALUE (MeV)	EVTS	DOCUMENT ID	TECN	COMMENT	
167.29 ± 0.13					OUR AVERAGE
167.32 ± 0.12					OUR FIT
$167.2 \pm 0.1 \pm 0.2$	2k	ARTUSO	02	CLE2	$e^+ e^- \approx Y(4S)$
$167.38 \pm 0.21 \pm 0.13$	362	LINK	00C	FOCS	γ nucleus, \bar{E}_γ 180 GeV
$167.38 \pm 0.29 \pm 0.15$	143	AITALA	96B	E791	$\pi^- N$, 500 GeV
$167.8 \pm 0.6 \pm 0.2$		ALEEV	96	SPEC	n nucleus, 50 GeV/c
$166.6 \pm 0.5 \pm 0.6$	69	FRABETTI	96	E687	γ Be, $\bar{E}_\gamma \approx 220$ GeV
$167.1 \pm 0.3 \pm 0.2$	124	CRAWFORD	93	CLE2	$e^+ e^- \approx Y(4S)$
$168.4 \pm 1.0 \pm 0.3$	14	ANJOS	89D	E691	γ Be 90–260 GeV
*** We do not use the following data for averages, fits, limits, etc. ***					
$167.9 \pm 0.5 \pm 0.3$	48	¹ BOWCOCK	89	CLEO	$e^+ e^-$ 10 GeV
$167.0 \pm 0.5 \pm 1.6$	70	¹ ALBRECHT	88D	ARG	$e^+ e^-$ 10 GeV
$178.2 \pm 0.4 \pm 2.0$	85	² DIESBURG	87	SPEC	n A ~600 GeV
163 ± 2	1	AMMAR	86	EMUL	ν A

¹ This result enters the fit through $m_{\Sigma_c^{++}} - m_{\Sigma_c^0}$ given below.

² See the note on DIESBURG 1987 in the $m_{\Sigma_c^{++}} - m_{\Sigma_c^0}$ section below.

HTML macro definitions

– SYMBOL

macro_name	type	text
>=	TEX	{ }\geq\allowbreak{ }
>=	ASCII	>=
>=	HTML	≥

macro_name	type	text
Ecmee	TEX	{\it{ }E}{\textstyle^{\it{ }ee}\setbox0=\hbox{A}\vrule height\ht0 width0pt depth0pt}_{\rm{ }cm}\setbox0=\hbox{y}\vrule height0pt width0pt depth\dp0}
Ecmee	ASCII	e+ e- Ecm
Ecmee	HTML	#italic{E}#supsub{,ee,cm}

Macro→HTML Parser

- parsing.scm

```
#chemical{ 129Xe* } :   129Xe*
```

```
(declare-prINTER H "chemical" 'F 'T 'F 'F
  (lambda (s)
    (let ((l1
          (pregexp-match-positions "([A-Z]+)" s )))
      (if l1
          (string-append "<sup>" (substring s 0 (car (car l1))))
              "</sup>" thinsp
              (pregexp-replace "*" 
                  (substring s (car (car l1))
                      (string-length s))
                  "<sup>&nbsp;*</sup>") s )
        )))
```

Tables with parsing exceptions

- TEXTS_PREP
 - FOOTNOTES_PREP
 - MEAS_PREP
- } some texts cannot yet be parsed; for these texts (~100 lines) we have special HTML translations

RPP_TEXT: #change_delimiters{![]}!tex[\leavevmode!]diff[,mass,
n,p]!tex[{}!]change_delimiters[#{}]

TEXTS_PREP: <i>m</i>_n−<i>m</i>_p

Future maintenance plans

- We plan to reduce the amount of work needed for pdgLive maintenance by elimination of some additional tables; it will require
 - changes in original RPP tables schema, i.e. adding new columns
 - introducing new Macros in texts in some RPP tables (`RPP_TEXT`, `MEASUREMENT`, `FOOTNOTE_BODY`)